

ANNEX AA
DAMAGE ASSESSMENT

A. PURPOSE

Damage assessment is the systematic gathering of information which details an emergency or disaster's nature and includes categories such as the effects on public and private property; numbers of people and communities affected, the potential dollar cost; and the extent or severity of communities/counties affected. This annex provides guidance for a damage assessment which will give the Governor enough information to decide whether or not to request Federal assistance to supplement State and local resources, to indicate what types of assistance should be requested, and to provide support for the request of Federal assistance. Damage assessment data also provides the information needed to efficiently and effectively manage the operation.

B. CONCEPT OF OPERATIONS

1. State agencies make assessments in two principal areas: Individual Assistance and Public Assistance. Individual Assistance assessment includes damage to homes, personal property, businesses, farms and unemployment resulting from a disaster (Appendices 1,2 and 3). Public Assistance damage assessment identifies damage to public facilities such as roads, bridges, public utilities, public buildings, schools and hospitals (Appendix 4).
2. The Office of Emergency Services directs State preliminary damage assessments (PDA).
3. A PDA is begun as soon as possible after destruction has peaked. When possible, the assessment should be completed within 48 hours. The Office of Emergency Services will identify the counties in which damage is to be assessed, and provide this information to the State agencies. In a large scale event assessment can and will go on after declaration is made.
4. Each State agency with damage assessment responsibilities appoints a standing damage assessment coordinator and identifies personnel qualified to assess damage and estimate the value of damaged or destroyed property.
5. Damage assessment coordinators are responsible for:
 - a. Directing their agency's damage assessment operations;
 - b. Assigning personnel to field inspection tasks;
 - c. Reviewing damage assessment information submitted by field personnel for thoroughness and credibility;
 - d. Compiling damage assessment information by county and submitting it to the Office of Emergency Services (Appendix 5).
6. Although assessment teams are expected to utilize their professional expertise in making cost projections, they should also be aware that they are making estimates.
7. The Office of Emergency Services is responsible for compiling a complete damage assessment by county for the Governor's use (Appendix 6).
8. The President may issue a Presidential Declaration before all affected areas have been assessed. However, the assessment must be finished in all areas so a full picture of the situation will be available to guide the recovery forces in meeting public and private disaster related needs and managing the recovery effort.
9. Federal personnel may be available shortly after the onset of the disaster. If so, they will accompany State agency personnel to do a preliminary damage assessment to verify the damage estimates to public and private property.

C. TASK ASSIGNMENTS

1. The Office of Emergency Services:
 - a. Directs State damage assessments;
 - b. Assigns teams to assess damage to private, non-profit facilities as required;
 - c. The Public Assistance Officer compiles final damage assessment for the Governor's use.
2. All State agencies and their respective damage assessment coordinator are responsible for assessing damage to their facilities.
3. Each State agency listed below is responsible for appointing a damage assessment coordinator to work with the Office of Emergency Services and Federal Agency Support Team Coordinators on joint damage assessment teams. Agencies need

to develop standard operating procedures in order to carry out their responsibilities in an efficient and timely fashion. This includes the Federal Emergency Management Agency (FEMA) and Small Business Administration (SBA).

Individual Assistance

4. The Department of Health and Human Resources assesses:
 - a. Need for Individual and Family Grant Program;
 - b. Need for emergency food stamps.
5. The Bureau of Employment Programs assesses unemployment resulting from the disaster.
6. The West Virginia State Police will gather information on disaster related deaths and injuries.
7. The Department of Agriculture assesses damage to agricultural property (Appendix 3).

Public Assistance

8. The Division of Highways assesses:
 - a. Costs of clearing debris from public lands (Category A);
 - b. Damage to road systems (Category C).
9. The Division of Environmental Protection assesses:
 - a. Damage to water control facilities (Category D);
 - b. Damage to government facilities (Category E);
 - c. Damage to storm drainage systems (Category F).
10. The WV Soil Conservation Agency (SCA) assesses costs of clearing debris from streams and other channels, reservoirs (Category A).
11. The Division of Tourism assesses damage to State and local recreational facilities (Category G).
12. The Office of Emergency Services:
 - a. Assesses costs of emergency protective measures (Category B);
 - b. Assesses costs of providing emergency communications (Category G);
 - c. Arranges transportation, as required, for all damage assessment teams.
13. The Bureau for Public Health assesses damage to:
 - a. Hospitals, nursing homes, and health facilities that are State licensed (Category E);
 - b. Sewage systems (Category F);
 - c. Water systems (Category F).
14. The Public Service Commission assesses:
 - a. Damage to publicly owned bus and trolley lines (Category E);
 - b. Damage to public telephone, electric and/or gas utility systems (Category F);
 - c. Costs of providing emergency public transportation (Category G);
 - d. Provides assistance to the Bureau for Public Health in assessing damage to water and sewer systems.
15. The Department of Education assesses damage to public school buildings (Category E).

16. The State College and University systems assess damage to public institutions of higher education (Category E).
17. The Division of Corrections assesses damage to State penal institutions (Category E).
18. The Adjutant General's Department:
 - a. Assesses damage to armories (Category E);
 - b. Reports National Guard expenditures (when activated by the Governor) to the Office of Emergency Services for inclusion in Category B.
19. The West Virginia State Police is responsible for reporting State Police expenditures to the Office of Emergency Services for inclusion in Category B.

D. AUTHORITIES AND REFERENCES

1. West Virginia Code, Chapter 15, Article 5
2. PL 92-288 as amended by PL 100-707
3. Code of Federal Regulations, Title 44, Section 206.33
4. American Red Cross Guidelines for Conducting Assessments, ARC 3029
5. American Red Cross Disaster Services Regulations and Procedures, ARC 3067

ANNEX AA
APPENDIX 1

DAMAGE ASSESSMENT PROCEDURES

HOUSING

Damage assessors will follow the general instructions to complete the Tally Sheets:

1. Enter in the space entitled "Disaster Area Covered by this Tally Sheet" the area assigned to you to assess. It is vital that the area be clearly defined by using street and road names.
2. Use the hash-mark system, e.g. four vertical lines and one diagonal line to represent a linear count of five.
3. Trace on your map the areas you assessed so that the limits of the damaged areas can be graphically portrayed.
4. Print all information legibly. Completed Tally sheets will have your name, date, and the time of the damage assessment and a readily discernible description and location of the damaged area(s) assessed.

Damage assessment teams will normally be composed of two or three members, one of whom will be familiar with the damaged area(s).

Inasmuch as the urgency of obtaining accurate damage assessment is paramount, teams will not be able to spend an inordinately long time at any one location. Normally, interior inspections should not be made. In some cases, particularly if access has been obstructed, it may be necessary to walk through the apartment complexes and mobile home parks. Nevertheless, damage assessments should be as factual and concise as possible, keeping in mind that it is merely an estimate of the damage situation.

If you encounter unusual situations that you are unable to handle satisfactorily, it is important that you apprise the Office of Emergency Services of the situation.

Do not hesitate to talk to local people about what happened in a particular area during the disaster. Their information will help you complete the Tally sheet. However, under no circumstances should you make a comment regarding whether or not Federal assistance will be provided.

Completing the Tally Sheet

Personnel performing a drive-through assessment of a portion of the disaster area will use the Tally Sheet to record their findings. Basically, three decisions must be made:

1. What degree of damage has the structure sustained;
2. The type of structure; and
3. Whether or not the structure is habitable.

The number of individual units which have sustained damage will be tallied with respect to the severity of damage, and the status of their habitability. Merely making these three decisions, however, does not provide the user of this data with a complete understanding of the true impact of, and needs created by, the disaster in the area observed. Related assessment data on impacts and needs are covered on the second page of the tally sheet. It is essential that this information be provided as a part of the drive through since this information is required to interpret the numerical data in a meaningful way.

For the damage assessment data to be meaningful, it is important that all personnel involved have a common understanding of damage criteria and of the categories of private structures. For purposes of this procedure, the damage criteria will be defined as follows:

1. Destroyed
Item/Building is a total loss or is damaged to the extent that it is not usable and not economically repairable.
2. Major Damage
Item/Building is damaged to the extent that it is no longer usable and may be returned to service only with extensive repairs.
3. Minor Damage
Item/Building is damaged and may be used under limited conditions; may be restored to service with minor repairs.
4. Affected Habitable
Homes only – minor damage to structure (porch, roof, underpinning, minor basement flooding) and suspected damage to contents. Structure is usable without repairs.

The Tally Sheet contains two categories. The following comments pertain to these categories:

1. Homes

Damage to personal possessions within a home is not considered in assessing the percent of damage to a home. Limit damage assessment to the structure itself. Townhouses, condominiums, mobile homes (only those used as primary residences), rental units and farm dwellings fall under Category 1. Damage to farm improvements, farm land and crops will be obtained from the Agriculture Stabilization and Conservation Service. The assessment for this category will be confined to damage to the farm home itself.

2. Recreational Dwellings

Record damage to recreational dwellings, trailer and motor homes in this category.

The assessment data section on the Tally Sheet contains several questions which should be answered as accurately and concisely as possible. The seven items are as follows:

1. Estimate the percentage of utilities that have been rendered inoperable due to the disaster.
2. Specify the high water mark level on the houses. When possible, note if the water mark level indicates the presence of sewage or chemicals. Comment on the destructiveness of the flood waters.
3. Specify the prevalent types of damaged home structures or construction, i.e., single family dwelling, frame and stucco or masonry, etc.
4. Specify whether damaged homes have basements and whether they are raised floor or concrete slab.
5. Comment on the presence of mud, silt and debris in and around the homes.
6. Comment on all types of insurance coverage on homes, farms and contents.
7. Comment on unusual conditions and other factors which you feel would be helpful for a complete understanding of the nature and severity of the damage which you observed.

PRELIMINARY DAMAGE ASSESSMENT

State: _____ County: _____ City: _____ Subdiv: _____

Type of Disaster: _____ Date of PDA: _____

PDA Team: _____

HOMES			DAMAGE CATEGORY				STATUS	INS	INCOME
	PRI	SEC	AFFECTED	MINOR	MAJOR	DEST.	%OWN	%INS	%LOW\$
SINGLE FAMILY									
APTS/ CONDO									
MOBILE HOMES									
TOTALS									

	No. of Households affected	No. of bridges
ROADS/ BRIDGES		

ANNEX AA
APPENDIX 2
BUSINESS
DAMAGE ASSESSMENT PROCEDURES

Damage assessors will follow the general instructions to complete the Tally Sheet.

1. Enter in the space entitled "Disaster Area Covered by this Tally Sheet" the area assigned to you to assess. It is vital that the area be clearly defined by using street and road names.
2. Trace on your map the areas you assessed so the limits of the damaged areas can be graphically portrayed.
3. Print all information legibly. Completed Tally Sheets will have your name, date and the time of the damage assessment and a readily discernible description and location of the damaged area(s) assessed. Damage assessment teams will normally be composed of two or three members, one of whom will be familiar with the demand area(s).

Since the urgency of obtaining accurate damage assessment is paramount, you will not be able to spend an inordinate amount of time at any one location. Damage assessments should be as factual and concise as possible, keeping in mind that it is merely an estimate of the damage situation.

If you encounter unusual situations which you are unable to handle, you should apprise the West Virginia Office of Emergency Services.

Under no circumstances should you make a comment regarding whether or not Federal assistance will be provided.

BUSINESS DAMAGE ASSESSMENT

TALLY SHEET

Areas Assessed (include Street/Highway Boundaries): _____

Date: _____ Time: _____ Assessor: _____

BUSINESS	NUMBER OF EMPLOYEES	STRUCTURAL DAMAGE	INVENTORY LOSS	EQUIPMENT/ MACHINERY	TOTAL LOSSES	DEGR DAMA

ANNEX AA
APPENDIX 3

AGRICULTURE NATURAL DISASTER DAMAGE ASSESSMENT REPORT

A. COUNTY EMERGENCY BOARD (CEB)

1. When required by the State Emergency Board (SEB) Chairperson, prepare report within time specified by SEB Chairperson. Consult with other board members and indicate CEB concurrence in report.
2. Reproduce form for Damage Assessment Report locally as needed.
3. Use term “farm” or “farmers” to cover farms, ranches, farmers, ranchers or aquiculture operations.
4. Report losses to aquiculture operations separately, completing only items 1 through 9 and other applicable items of the form.
5. Complete specific items as follows:
 - a. Item 3 Enter:
 - (1) Total number of farmers in county.
 - (2) Number of farmers who sustained losses as a result of natural disaster based on a general survey, including discussions with knowledgeable persons.
 - b. Item 4:
 - (1) Indicate:
 - (a) Type of natural disaster. Example: Drought, flood, windstorm, excessive rainfall, hailstorm, blizzard, early freeze or frost, hurricane, or tornado. If a major animal or poultry disease outbreak occurs, immediately following a natural disaster, state how abnormal weather may have contributed to spread of disease to epidemic stages.
 - (b) Actual date or dates on which natural disaster occurred. Enter for use in incident period.
 - (2) Where only part of county is involved, attach map delineating area affected.
 - c. Items 5 through 9
List all principal commercial crops, including pastures and timber in the order of their importance to the county’s agricultural economy.
 - d. Items 5 through 14
 - (1) Crops and livestock – Use price information furnished by the SEB Chairperson in establishing dollar losses of crops (including pastures and timber) and livestock.
 - (2) Aquiculture Operations – Use information furnished by the SEB Chairperson in estimating unit and dollar losses of aquiculture operations.
 - e. Items 15 through 20
Use the value of farm buildings and equipment as determined by the CEB in estimating dollar losses.
 - f. Item 21
Include damage and losses to farmland, fences, timberland, drainage outlets, irrigation systems, etc.
6. Submit written report to SEB Chairperson with copies to:
 - a. Appropriate county government representatives
 - b. CEB members

B. STATE EMERGENCY BOARD

1. Edit each county report as necessary in cooperation with USDA and other board members as appropriate and indicate SEB concurrence.

2. Send each report by mail within two work days after receiving report from CEB to USDA Regional Director. Attention: Emergency Preparedness Division, with copies to:
 - a. State Emergency Services Director, and State Department of Agriculture
 - b. SEB members
 - c. FEMA III Regional Director, upon request
 - d. National Weather Service, NOAA State Representative

ANNEX AA
APPENDIX 4

GUIDE TO PUBLIC ASSISTANCE
DAMAGE ASSESSMENT CATEGORIES

CATEGORY A: DEBRIS CLEARANCE

Includes residue deposited as a result of flood, hurricane and tornadoes. Also includes snow and ice.

- Clearance of channels and waterways when danger to improved property exists.
- Clearance of water supply reservoirs.
- Clearance of public roads, streets, highways and drainage ditches alongside.
- Clearance from other public property such as County Courthouse, municipal buildings.
- Clearance of private property, when in public interest.
- Removal of debris from private non-profit facilities.

CATEGORY B: PROTECTIVE MEASURES

Includes action taken to preserve life or to prevent imminent damage to public and private property.

- Cost of barricades and sandbagging.
- Pay for additional police and guards. (Separate regular and overtime costs).
- Cost of evacuation.
- Cost of pumping.
- Cost of search and rescue.
- Cost of boarding up windows in public facilities.
- Emergency demolition costs.
- Emergency stream and channel clearance costs.

CATEGORY C: ROADS AND BRIDGES

Includes damage to Federal Aid System (FAS), non-FAS, local government and orphan facilities. Report FAS and non-FAS separately.

- Cost of constructing detours and bypasses.
- Cost of gravel or bituminous materials to repair damaged shoulders to prevent erosion.
- Shoulders, embankment and drainage ditches washed out.
- Bridges damaged or destroyed.
- Mud slides covering roads.
- Culverts washed out.
- Manholes, curbs, sidewalks, and gutters washed out.

- Roads, streets and highways washed out.

CATEGORY D: WATER CONTROL FACILITIES

- Dams or reservoirs destroyed or damaged.
- Levees or dikes destroyed or damaged.
- Drainage channels destroyed or damaged.

CATEGORY E: PUBLIC BUILDINGS AND EQUIPMENT

Includes all publicly owned buildings, equipment, vehicles, supplies and inventory.

- Local government owned buildings destroyed or damaged.
- Public schools destroyed or damaged.
- Public institutions of higher education destroyed or damaged.
- Hospitals and other health facilities destroyed or damaged.
- Penal institutions destroyed or damaged.
- Armories destroyed or damaged.
- Publicly owned bus and trolley lines destroyed or damaged.

CATEGORY F: PUBLIC UTILITY SYSTEMS

- Storm drainage systems destroyed or damaged.
- Sewage systems destroyed or damaged.
- Water systems destroyed or damaged.
- Public telephone, electric and/or gas utility systems destroyed or damaged.

CATEGORY G: RECREATION/OTHER

- State owned parks and recreational facilities destroyed or damaged.
- Local government owned parks and recreational facilities destroyed or damaged.
- Cost of providing emergency communications.
- Cost of providing temporary public transportation.

ANNEX AA
APPENDIX 5

PUBLIC ASSISTANCE DAMAGE ASSESSMENT REPORT

Agency: _____ Date: _____

Name: _____ County: _____

Provide as much detail as possible. Use Descriptive words where dollar figures are not available. Provide statistical data, as outlined below for each requested county.

Cat A. Debris Clearance

1. Public Property \$ _____
2. Streams \$ _____

Cat B. Protective Measures

Life and safety,
Health, property
Stream/drainage \$ _____

Cat C. Road Systems

FAS NON-FAS

1. Shoulder Damage \$ _____ \$ _____
2. Bridges \$ _____ \$ _____
 - a. # destroyed _____
 - b. # damaged _____
3. Slides (not to be Included in Cat A)
 - a. Estimated # _____
 - b. Cost of Removal \$ _____ \$ _____
4. Roadway Washouts
(Do not include bridge approaches)
Approximate # _____

Total Cost – Cat. C \$ _____ \$ _____

County: _____

Cat D. Water Control Facilities

(Dikes, levees, dams, drainage
channels, and irrigation works) \$ _____

Cat E. Public Buildings & Equipment

(Buildings, supplies, inventory,
vehicles, equipment, transporta-
tion systems) \$ _____

Cat F. Public Utility Systems

(Water, storm drainage, sanitary
sewerage, light/power/telephone\$ _____

Cat G. Recreation/Other

(Park and recreational
facilities

\$ _____

\$ _____

Other – Describe

\$ _____

\$ _____

Public Assistance Totals

\$ _____

PUBLIC ASSISTANCE DAMAGE ASSESSMENT
PUBLIC FACILITIES REPORT

County: _____ Town: _____ Date: _____

Name of Facility: _____ Category: _____

Address: _____

Owner or Contact: _____

Construction Type: Wood Frame _____ Masonry _____ Other _____

1. Bldg. Condition: _____ Safe for Occupancy
_____ Habitable, Repairs Necessary
_____ Uninhabitable – Keep Out
_____ Demolition Recommended

Estimated Repair Costs

2. Exterior Wall Condition: _____ No Damage _____ Windows Gone
_____ Siding Damage _____ Holes in Wall _____ Wall Bowed (which wall) _____
_____ Wall Unsafe (which wall) _____ _____ Wall Gone (which wall) _____
Comments: _____ \$ _____

3. Roof Condition: _____ No Damage _____ Holes in Roof _____ Roof Gone
_____ Shingle Damage _____ Structural Damage _____ Roof Unsafe
Comment _____ \$ _____

4. Foundation Condition: _____ No Damage _____ Crawl Space _____ Basement
_____ Building Shifted _____ Building off Foundation _____ Foundation Cracked
(which walls) _____ \$ _____
Comment _____ \$ _____

5. Floor Condition: First Floor _____ No Damage
Second Floor _____ No Damage
_____ Holes in Floor _____ Floor Shifted _____ Structural Damage

6. Interior Walls: _____ No Damage _____ Shifted _____ Structural Damage
Comment: _____ \$ _____

7. Heating System: _____ No Damage _____ Duct Damage _____ Appliance Damage
Comment: _____ \$ _____

8. Plumbing System: _____ No Damage _____ Fixture _____ Piping Damage
Comment: _____ \$ _____

9. Electrical System: _____ No Damage _____ Fixture Damage
_____ Circuit Breaker Box Damage
Comment: _____ \$ _____

10. Utilities Condition: Gas _____ No Damage

Electric ☐ No Damage

Water ☐ No Damage

Sewer ☐ No Damage

Telephone ☐ No Damage

Comment: _____ \$ _____

11. Additional Comments: _____

Total \$ _____

Field Inspector: _____

Reporting Agency: _____ Name: _____

ESTIMATED REQUIREMENTS FOR PUBLIC ASSISTANCE, PUBLIC LAW 93-288, AS AMENDED

Category	A	B	C	D	E	F	G	
County/ City	Debris	Protective Measures	Road Systems	Water Control	Public Buildings	Public Utilities	Other	Totals

ANNEX AA
APPENDIX 6

FINAL REPORT FORM
ESTIMATED COSTS BY CATEGORY OF PUBLIC AND INDIVIDUAL ASSISTANCE

Provide as much detail as possible. Use descriptive words where dollar figures are not available. Provide statistical data, as outlined below for each requested county.

1.	Public Assistance	County: _____
	Cat. A. Debris Clearance	
	(Public Property and streams)	\$ _____
	Cat. B. Protective Measures	
	(Life and safety, health, property, stream/drainage channels)	\$ _____
	Cat. C. Road Systems	<u>FAS</u> <u>NON-FAS</u>
1.	Shoulder Damage	() ()
2.	Bridges	() ()
	a. #Destroyed	_____
	b. #Damaged	_____
3.	Slides (not to be included In Cat. A)	
	a. Estimated #	_____
	b. Cost of removal	\$ _____ \$ _____
4.	Roadway Washouts (Do not include bridge approaches)	
	Approximate #	_____
	Total Cost – Cat. C	\$ _____ \$ _____
	Cat. D. Water Control Facilities	County: _____
	(Dikes, levees, dams, drainage channels, and irrigation works)	\$ _____
	Cat. E. Public Buildings & Equipment	
	(Buildings, supplies, inventory, vehicles, equipment, transporta- tion systems, higher education facilities)	\$ _____
	Cat. F. Public Utility Systems	
	(Water, storm drainage, sanitary sewerage, light/power/telephone)	\$ _____
	Cat. G. Recreation/Other	
	(Park and recreational facilities)	\$ _____
	Public Assistance Totals	\$ _____

State's estimate of the number of public entities who will apply for assistance (do not include private non-profit facilities)

State's estimate of the number of private non-profit entities who will apply for assistance through an eligible applicant.

State's estimate of the number of potential applicants having insurance on all or some of damaged facilities and the percentage of coverage

1. Individual Assistance

By County (and location if concentrated provide the following:

A. Housing

Number of families needing temporary housing (determined by number of uninhabitable units).

B. Businesses

Number of businesses damaged and not covered by insurance.

C. Employment

Number of people who are unemployed as a direct result of the disaster situation.

D. Farm

What is the type(s) and extent of farm damage and how many individual farmers were affected.

E. Food

Are people having trouble getting food or preparing available food? If so, how many?

F. Section 408

How many people have serious needs or necessary expenses which will not be met by other governmental means and what is total dollar estimate required to meet IFG Program needs and expenses?

ANNEX AA
APPENDIX 7

INDIVIDUAL ASSISTANCE
Damage Assessment Sequence

